

Ecography

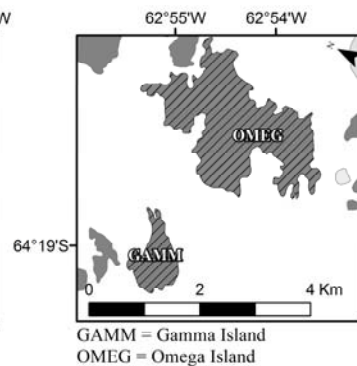
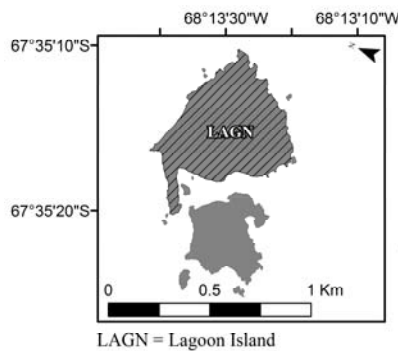
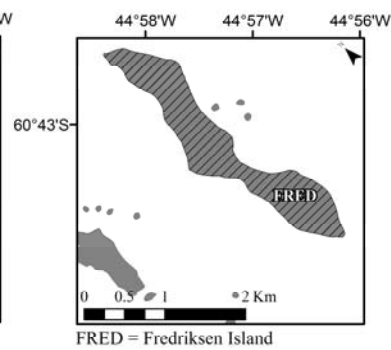
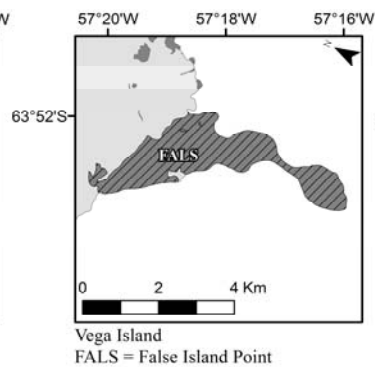
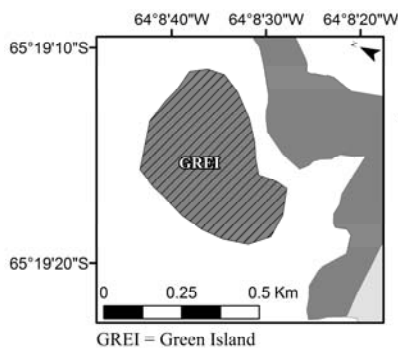
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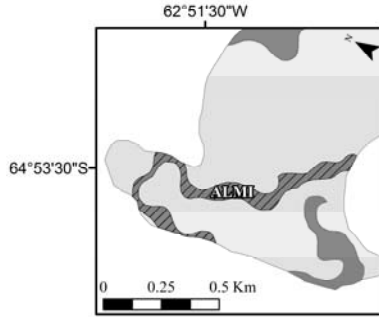
Casanovas, P., Lynch, H. J. and Fagan, W. F. 2012.
Multi-scale patterns of moss and lichen richness on the
Antarctic Peninsula. – *Ecography* 35: xxx–xxx.

Supplementary material

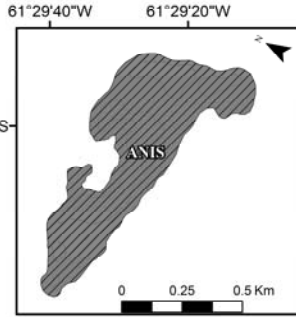
APPENDIX 1

Maps showing the sites used in this study. Base maps are from the Antarctic Digital Database (BAS, SPRI, and WCMC 1993, last accessed April 2011). The projection used for the maps is South Pole Lambert Azimuthal Equal Area, map made using ArcMap 10.0. Dark gray shows ice-free land, dashed area shows the sites used for this study.

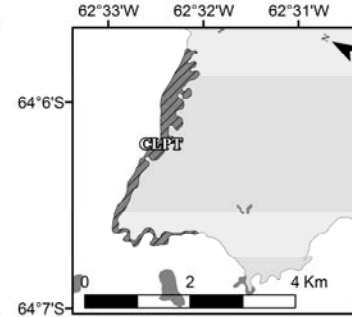




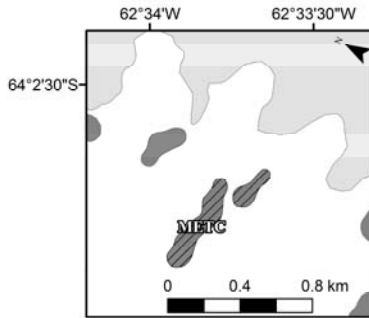
ALMI = Brown Station Vicinity



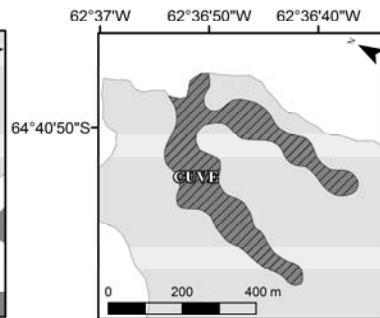
ANIS = Andree Island



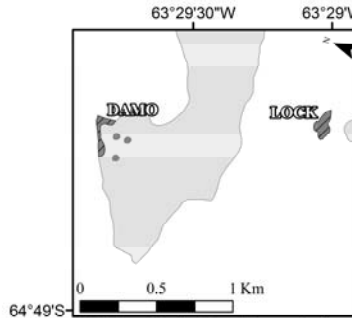
Brabant Island
CLPT = Claude Point



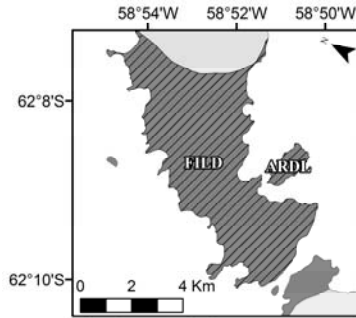
Brabant Island
METC = Metchnikoff Point



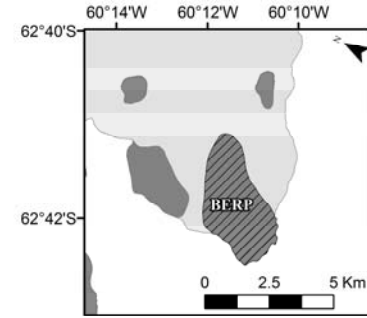
CUVE = Cuverville Island



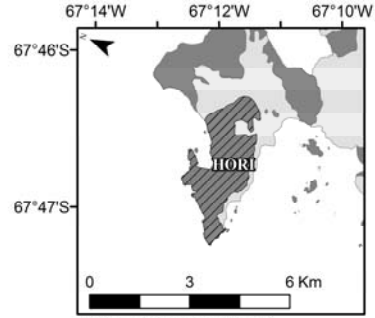
DAMO = Dorian Bay/Damoy Point
LOCK = Port Lockroy



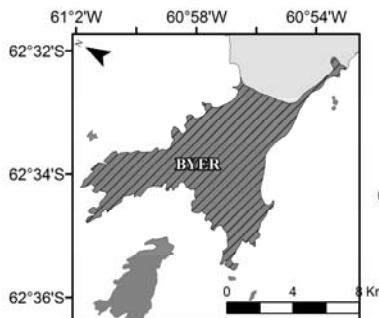
King George Island
ARDL = Ardley Island
FILD = Fildes Peninsula



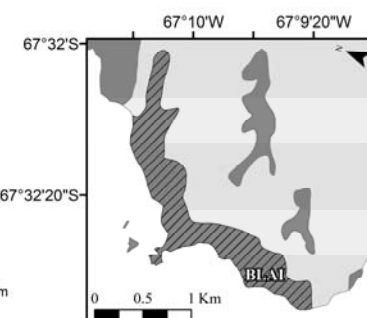
Livingston Island
BERP = Bernard Point



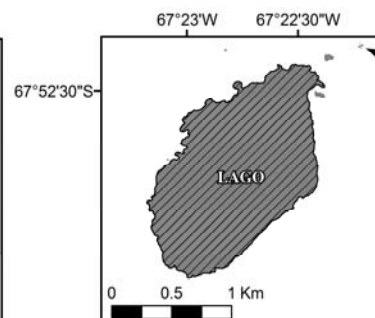
HORI = Horseshoe Island



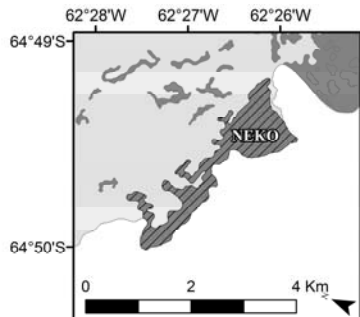
Livingston Island
BYER = Byers Peninsula



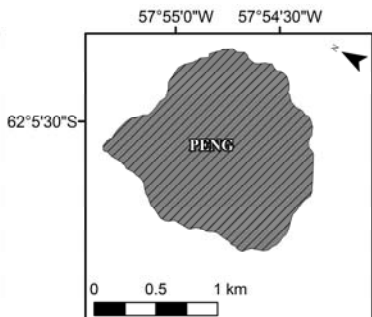
BLAI = Blaioklock Island



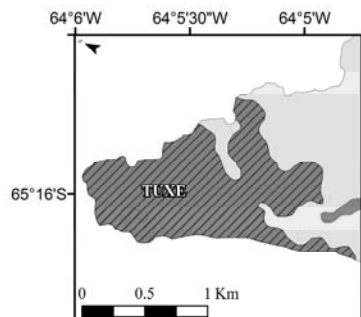
LAGO = Lagotellerie Island



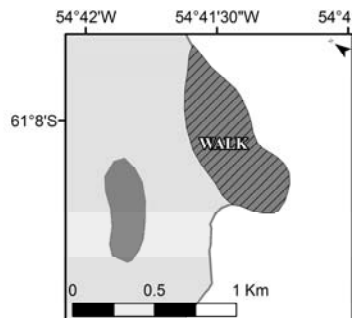
NEKO = Neko Harbor



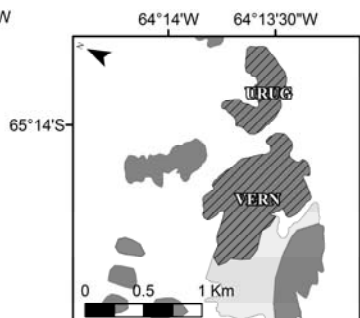
PENG = Penguin Island



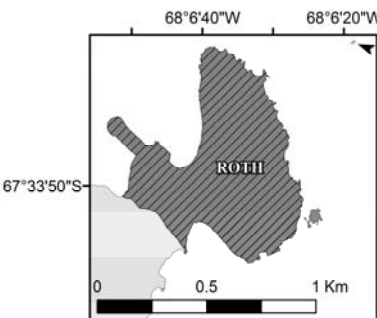
TUXE = Cape Tuxen



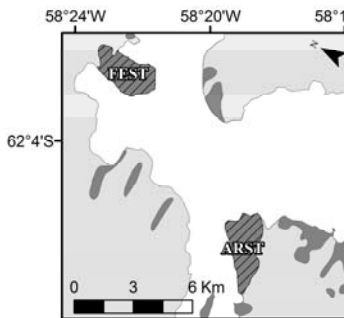
Elephant Island
WALK = Walker Point



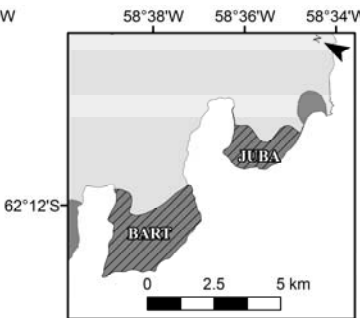
URUG = Uruguay Island
VERN = Vernadsky Station Vicinity



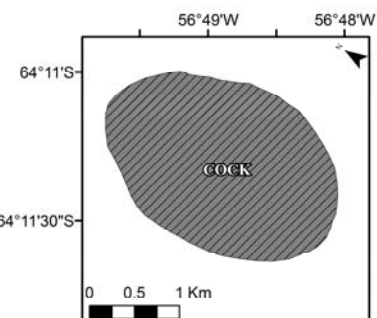
Adelaide Island
ROTH = Rothera Point



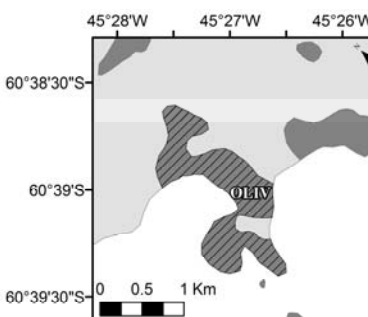
King George Island
ARST = Arctowski Station Vicinity
FESR = Ferraz Station Vicinity



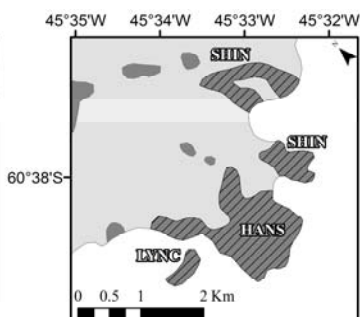
King George Island
BART = Barton Peninsula
JUBA = Jubany Station Vicinity



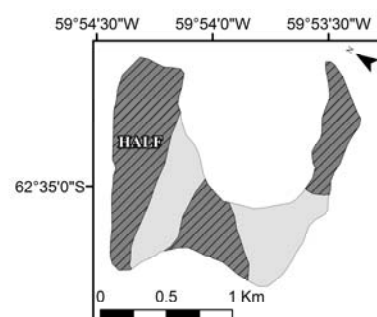
COCK = Cockburn Island



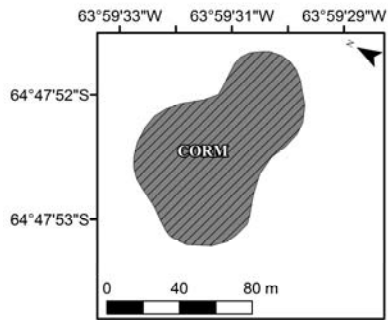
Coronation Island
OLIV = Olivine Point



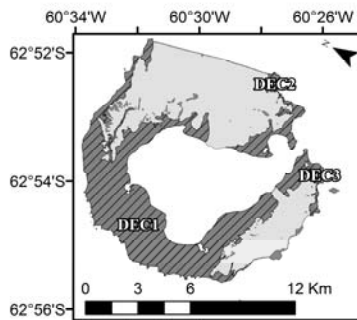
Coronation Island
HANS = Cape Hansen
SHIN = Shingle Cove
LYNC = Lynch Island



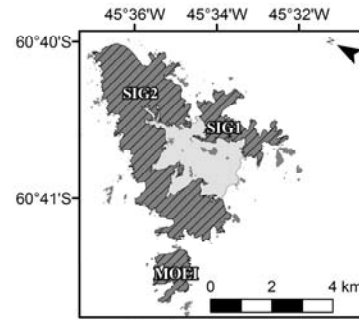
HALF = Half Moon Island



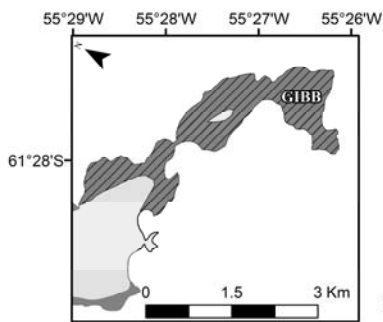
CORM = Cormorant Island



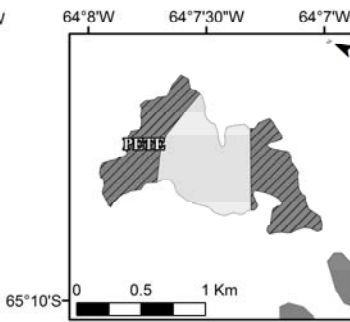
Deception Island
DEC1, DEC2, DEC3 = Sites 1, 2 and 3



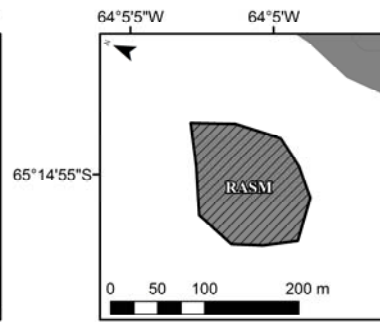
Signy Island
SIG1, SIG2 = Sites 1 and 2
MOEI = Moc Island



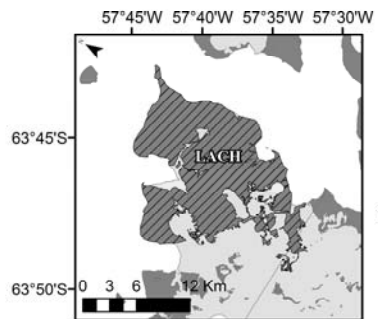
GIBB = Gibbs Island



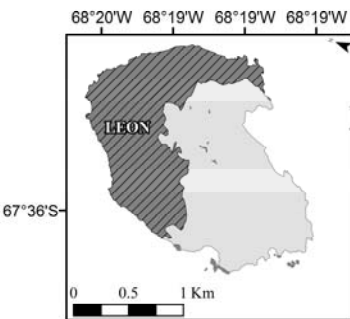
PETE = Petermann Island



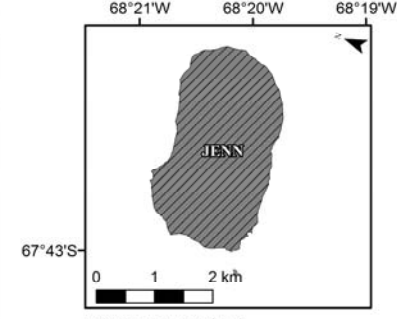
RASM = Rasmussen Island



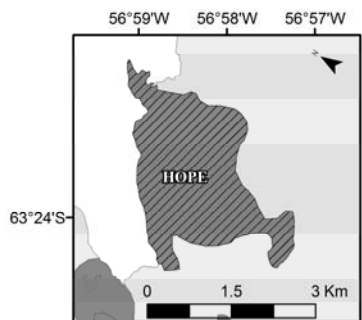
James Ross Island
LACH = Cape Lachman



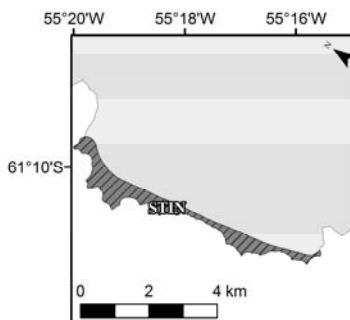
LEON = Léonie Island



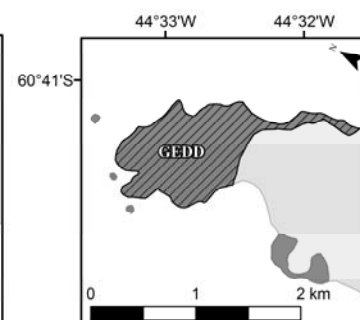
JENN = Jenny Island



HOPE = Hope Bay



Elephant Island
STIN = Stinker Point



Laurie Island
GEDD = Cape Geddes

APPENDIX 2

Papers with moss and lichen data used for this study:

1. Aptroot, A. & van der Knaap, W.O. (1993) The lichen flora of Deception Island, South Shetland Islands. *Nova Hedwigia*, 56, 183–192.
2. De Leeuw, C., Aptroot, A. & Van Zanten, B. (1998) The lichen and bryophyte vegetation of Cuverville Island, Antarctica. *Nova Hedwigia*, 67, 469-480.
3. Martins, M.F.N., Spielmann, A.A., Putzke, J. & Pereira, A.B. (2004) Lichenized fungi on man-made substrata in Deception Island, South Shetland Islands, Antarctica. p. Ciudad Autónoma de Buenos Aires, Argentina.
4. Pereira, A.B., Putzke, M.T.L. & Putzke, J. (2008) Biological Communities Of Keller Peninsula, King George Island-Antarctica* Comunidades Biológicas Da Península Keller, Ilha Rei George–Antártica. *Caderno de Pesquisa Sér. Bio.*, Santa Cruz do Sul, 20, 63–74.
5. Pereira, A.B., Spielmann, A.A., Martins, M.F.N. & Francelino, M.R. (2007) Plant communities from ice-free areas of keller peninsula, king george island, antarctica. *Oecologia Brasiliensis*, 11, 14.
6. Smykla, J., Wołek, J. & Barcikowski, A. (2007) Zonation of Vegetation Related to Penguin Rookeries on King George Island, Maritime Antarctic. *Arctic, Antarctic, and Alpine Research*, 39, 143–151.
7. Tatur, A., Myrcha, A. & Niegodzisz, J. (1997) Formation of abandoned penguin rookery ecosystems in the maritime Antarctic. *Polar Biology*, 17, 405-417.

8. Victoria, F. de C., Costa, D. & Pereira, A.B. (2004) Characterization of plant communities in ice-free areas adjoining the Polish station H. Arctowski, Admiralty Bay, King George Island, Antarctica. p. Ciudad Autónoma de Buenos Aires, Argentina.
9. Winkler, J.B. (2000) The role of snowcover on the cryptogamic vegetation in the maritime Antarctic (Potter Peninsula, King George Island). *Berichte zur Polarforschung*, 371, 151.

Papers with penguin data used in this study:

1. Aguirre, C.A. & Acero, J.M. (1995) Distribution and abundance of birds in the Errera Channel, Antarctic Peninsula, during the 1992/93 breeding season. *Marine Ornithology*, 23, 129–134.
2. Araya, B. & Arrieta, A. (1971) Las aves de Caleta Potter, Isla Rey Jorge, Antartica Chilena -censo y distribucion. *Rev. Biol. mar.*, 14, 221-228.
3. Chwedorzewska, K.J. & Korczak, M. (2010) Human impact upon the environment in the vicinity of Arctowski Station, King George Island, Antarctica. *Pol. Polar Res*, 31, 45–60.
4. Copley, N.D. & Shears, J.R. (1999) Breeding performance of gentoo penguins (*Pygoscelis papua*) at a colony exposed to high levels of human disturbance. *Polar Biology*, 21, 355–360.
5. Croxall, J.P. & Davis, L.S. (1999) Penguins: paradoxes and patterns. *Marine Ornithology*, 27, 1-12.
6. Müller-Schwarze, C. & Müller-Schwarze, D. (1975) A survey of twenty-four rookeries of pygoscelid penguins in the Antarctic Peninsula region. *The biology of penguins*.
7. Poncet, S. & Poncet, J. (1987) Censuses of penguin populations of the Antarctic Peninsula. 1983-87. *British Antarctic Survey Bulletin*, 77, 109-129.

8. Shuford, W.D. & Spear, L.B. (1988) Surveys of breeding chinstrap penguins in the South Shetland Islands, Antarctica. *British Antarctic Survey Bulletin*, 81, 19–30.
9. Trathan, P.N., Forcada, J., Atkinson, R., Downie, R.H. & Shears, J.R. (2008) Population assessments of gentoo penguins (*Pygoscelis papua*) breeding at an important Antarctic tourist site, Goudier Island, Port Lockroy, Palmer Archipelago, Antarctica. *Biological Conservation*, 141, 3019-3028.
10. Zale, R. (1994) Changes in size of the Hope Bay Adélie penguin rookery as inferred from Lake Boeckella sediment. *Ecography*, 17, 297–304.